

Application No.: 10/821,710
Response to Restriction Requirement of 10/15/04

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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-43 (canceled).

Claim 44 (currently amended) An isolated nucleic acid molecule comprising:
a first ribonucleotide (RNA) sequence wherein said first RNA sequence is about 20-100 nucleotides in length, and wherein said first RNA sequence is at least 80% identical to a sequence complementary to a region of a target gene, and

a second RNA sequence wherein said second RNA sequence is complementary to said first RNA sequence,

wherein said nucleic acid molecule is capable of post-transcriptionally repressing, delaying or otherwise reducing expression of the target gene in an animal a mammalian cell when the nucleic acid molecule is introduced into said animal mammalian cell wherein the expression of the target gene is reduced by sequence-specific degradation of a RNA transcript of the target gene by an endogenous system of the mammalian cell.

Claim 45 (previously presented) The nucleic acid molecule according to claim 44, wherein said first RNA sequence is at least 90% identical to a sequence complementary to said sequence complementary to said region of said target gene.

Claim 46 (previously presented) The nucleic acid molecule according to claim 44, wherein said first RNA sequence is at least 95% identical to a sequence complementary to said sequence complementary to said region of said target gene.

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Claim 47 (previously presented) The nucleic acid molecule according to claim 44, wherein said first and second RNA sequences consist essentially of ribonucleotides.

Claim 48 (previously presented) The nucleic acid molecule according to claim 44, wherein at least one of said first and second RNA sequences is comprised at least partially of ribonucleotide analogues.

Claim 49 (previously presented) The nucleic acid molecule according to claim 44, wherein said first RNA sequence is 24 nucleotides in length.

Claim 50 (previously presented) The nucleic acid molecule according to claim 44, wherein said first RNA sequence is 23 nucleotides in length.

Claim 51 (previously presented) The nucleic acid molecule according to claim 44, wherein said first RNA sequence is 22 nucleotides in length.

Claim 52 (previously presented) The nucleic acid molecule according to claim 44, wherein said first RNA sequence is 21 nucleotides in length.

Claim 53 (previously presented) The nucleic acid molecule according to claim 44, wherein said first RNA sequence is 20 nucleotides in length.

Claim 54 (previously presented) The nucleic acid molecule according to claim 44, wherein said first RNA sequence is 19 nucleotides in length.

Claim 55 (previously presented) The nucleic acid molecule according to claim 44, wherein said second RNA sequence is 18 nucleotides in length.

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Claim 56 (previously presented) The nucleic acid molecule according to any one of claims 49-55, wherein said first RNA sequence is about the same length as said second RNA sequence.

Claim 57 (previously presented) The nucleic acid molecule according to any one of claims 49-55, wherein said first RNA sequence is the same length as the second RNA sequence.

Claim 58 (previously presented) The nucleic acid molecule according to claim 44, wherein the first and second RNA sequences are in the same nucleic acid strand.

Claim 59 (previously presented) The nucleic acid molecule of claim 58, wherein the first and second RNA sequences are separated by a nucleic acid stuffer sequence.

Claim 60 (previously presented) The nucleic acid molecule according to claim 44, wherein the first and second RNA sequences are in separate nucleic acid strands.

Claim 61 (currently amended) The nucleic acid molecule according to claim 44, wherein the first RNA ~~sequences~~ sequence is identical to said sequence complementary to said region of said target gene and exactly complementary to said second RNA sequence.

Claim 62 (currently amended) A method of delaying, repressing, or otherwise reducing the expression of a target gene in ~~an animal~~ a mammalian cell, comprising introducing the nucleic acid molecule of claim 44 to the ~~animal~~ mammalian cell.

Claim 63 (Previously presented) The method according to claim 62, wherein said first and second RNA sequences consist essentially of ribonucleotides.

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Claim 64 (Previously presented) The method according to claim 62, wherein at least one of said first and second RNA sequences is comprised at least partially of ribonucleotide analogues.

Claim 65 (Previously presented) The method according to claim 62, wherein said first RNA sequence is 23 nucleotides in length.

Claim 66 (Previously presented) The method according to claim 62, wherein said first RNA sequence is 22 nucleotides in length.

Claim 67 (Previously presented) The method according to claim 62, wherein said first RNA sequence is 21 nucleotides in length.

Claim 68 (Previously presented) The method according to claim 62, wherein said first RNA sequence is 20 nucleotides in length.

Claim 69 (Previously presented) The method according to claim 62, wherein said first RNA sequence is 19 nucleotides in length.

Claim 70 (Previously presented) The method according to claim 62, wherein said first RNA sequence is 18 nucleotides in length.

Claim 71 (Previously presented) The method according to any one of claims 65-70, wherein said first RNA sequence is about the same length as the second RNA sequence.

Claim 72 (Previously presented) The method according to any one of claims 65-70, wherein said first RNA sequence is the same length as the second RNA sequence.

Claim 73 (Previously presented) The method according to claim 62, wherein said first and second RNA sequences are in the same nucleic acid strand.

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Claim 74 (Previously presented) The method according to claim 73, wherein said first and second RNA sequences are separated by a nucleic acid stuffer sequence.

Claim 75 (Previously presented) The method according to claim 62, wherein the first and second RNA sequences are in separate nucleic acid strands.

Claim 76 (currently amended) The method according to claim 62, wherein the first RNA sequences sequence is identical to said sequence complementary to said region of said target gene and exactly complementary to said second RNA sequence.

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